

pared with those of fishes; but M. Leydig does not accept this assimilation. The kidneys, according to him, have the same structure in the *Cæcilie* as in the other Amphibia, and even remind him of the organization of the kidneys of serpents. Moreover the affinity with the Ophidia does not depend solely upon the general form of the body, but also upon the dentition and upon the atrophy of one of the lungs.

The predominant affinities of the *Cæcilie*, however, are incontestably with the Amphibia: in support of this we may cite the richly glandular skin, the structure of the hyoid bone, the double occipital condyle on the cranium, the rudimentary ribs, and the presence of branchiæ in the young. We may also mention the existence of lachrymal glands, which are entirely wanting in fishes. As to the "false nostril," we may regard it either as a homologue of the cephalic fossa of the Ophidia or as a special organ.—*Siebold & Kolliker's Zeitschrift*, xviii. pp. 575–596; *Bibl. Univ.* xxxv. July 15, 1869, *Bull. Sci.* pp. 243–246.

*On the Spire of Voluta Thatcheri.* By Prof. FREDERICK M'COY.

Since the description and figure of *Voluta Thatcheri* (M'CoY) were published in the 'Annals' for January 1868, I have got some fine specimens from Wreck Reef, North-east Australia, showing the spire to be rather slender, obtusely pointed, and composed of whorls, the two lower of which have nine or ten conical spines in a whorl, and those nearer the apex have a corresponding number of longitudinal ridges. The transverse rows of blotches are more red than in the first dead specimen, and the space between them netted with a paler orange pattern defining irregular trigonal white blotches.

I may also mention that I have likewise obtained specimens of *Voluta canaliculata*, described in the last Number of the 'Annals' (p. 34), from the same locality (Wreck Reef), with the colour more perfect and showing the lineations.

Melbourne, May 21, 1869.

*On two new Species of Gyrodus.* By Sir PHILIP DE MALPAS GREY EGERTON, Bart., M.P., F.R.S., V.P.G.S.

The author remarked upon the characters of the genus *Gyrodus*, of which he described two new species, namely, *G. Goweri*, from a deposit of Oolitic age on the east coast of Sutherland, having the scales covered with a somewhat reticulated raised pattern, interspersed with granules; and *G. coccoderma*, from the Kimmeridge Clay of Kimmeridge, having the scales adorned with a multitude of symmetrical granules, which show no tendency to coalesce. The author also described a vomer of *Sphærodus gigas*, bearing teeth of the form usual in that genus, and remarked that this specimen established the validity of the genus *Sphærodus*.—*Proc. Geol. Soc.* June 23, 1869.